

Patent Abstracts of Japan

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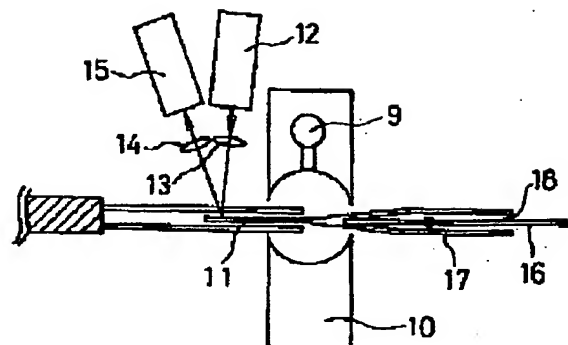
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TITLE : DETECTOR FOR CAPILLARY
ELECTROPHORESIS



ABSTRACT : PROBLEM TO BE SOLVED: To effectively detect an extremely small amt. of a sample such as protein, peptide, nucleic acid or a nerve transfer-related substance with high sensitivity by utilizing Raman spectroscopy using SERS(surface enforcing Raman scattering).

SOLUTION: The terminal of a capillary is connected to a glass cell having a reference electrode 9 built therein and a silver electrode 11 is inserted into the capillary from the terminal of the capillary. The beam from a light source 12 for Raman spectroscopy such as laser is condensed to the silver electrode 11 by a condensing system 13 and scattered light is condensed by using a condensing system and measured by a multichannel detector 15 for Raman spectroscopy. By using a minute electrode having SERS activity in the detector as mentioned above, sensitivity can be enhanced markedly. Further, by obtaining a spectrum, even a sample incapable of been separated by capillary electrophoresis can be spectroscopically separated and the separation capacity thereof can be enhanced.

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